

OFFICE OF BRIDGES AND STRUCTURES



FHWA Webinar: Standardization of Bridge Information Modeling (BrIM)

Date: April 27, 2015. Time: 2-3:30 PM EDT

URL: https://connectdot.connectsolutions.com/fhwabrim1/

Description:

The Federal Highway Administration, Office of Bridges and Structures has worked over the last few years to determine the needs of the bridge industry when it comes to applying Building Information Modeling (BIM) methodologies to bridges. Initial work on Bridge Information Modeling (BrIM) was conducted in cooperation with The State University of New York at Buffalo.

Recently FHWA has contracted with CH2M Hill to review and summarize progress to date and further its development towards the goal of producing standardized bridge objects, digital definitions, and protocols that can be interchanged between different software platforms (CAD, Design & Analysis applications, visualization, etc.) and ultimately benefit end users (Designer, Owner, Contractor, Supplier, etc.) The work is being deployed and tested in OpenBrIM version 3 (developed by Red Equation Corp.), which is an open source, cloud based system, using standard XML language. The intent is that standardized objects can be developed by software developers and/or end users. This concept will ultimately rely on active participation from the bridge community to develop sufficient standards to make the system robust.

FHWA has also contracted the National Institute of Building Sciences (NIBS), to review and evaluate the BrIM work as well as other existing and potential approaches to modeling bridges. In particular, NIBS is focusing on evaluating the buildingSMART Industry Foundation Class (IFC) standard which is widely used for modeling buildings, but is also being extended to cover civil infrastructure. NIBS has prepared a Summary Report reviewing the various options and providing a gap analysis of approaches that is being readied to share for industry review. The report includes modeling of a sample bridge using IFC as well as documentation of the required exchanges between software across the bridge lifecycle to identify how these could be implemented using buildingSMART and related ISO standards.

This webinar will present the FHWA work progress to date and solicit feedback on the needs of the bridge industry and the direction taken.

Summary Agenda:

1. Overview of projects and FHWA goals

2. BrIM Modeling Extensions and Applications

3. Bridge Modeling Evaluation – IFC and other approaches

4. Q&A/Discussion

Brian Kozy, FHWA Mike Bartholomew, CH2M Roger Grant, NIBS

All

Who Should Attend:

The target audiences for this Webinar are bridge engineers, owners, software providers, etc. that have an interest in advancement of BrIM in common engineering applications. Participants will be able to download the presentations at the webinars. All webinars will be recorded for later use.

Registration:

No registration is necessary to join the webinar. You can use the link provided to access the web meeting page and conference call for audio. If you have any questions, please contact Brian Kozy at (202)493-0341 or brian.kozy@dot.gov.